

University of Pretoria Yearbook 2019

Optimum design 780 (MOO 780)

Qualification Postgraduate

Faculty [Faculty of Engineering, Built Environment and Information Technology](#)

Module credits 16.00

Programmes [BEngHons Mechanical Engineering](#)
[BScHons Applied Science Mechanics](#)

[BScHons Applied Science Mechanics: Physical Asset Management](#)

Prerequisites No prerequisites.

Contact time 21 contact hours per semester

Language of tuition Module is presented in English

Department Mechanical and Aeronautical Engineering

Period of presentation Semester 2

Module content

Introduction to design and elements of computer aided design. Optimum design problem formulation. Optimum design concepts. Linear programming methods. Integer programming. Numerical methods for unconstrained and constrained optimum design. Model reduction. Interactive and practical design optimisation.

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